Listing of Claims

1. (original) A method of making multiple substantial replicas of a biomolecular content of a multi-well sample holder, which method comprises:

providing a multi-well sample holder in physical contact with a stack of membranes;

applying two or more samples comprising biomolecules to at least two wells of the multi-well sample holder, under conditions that

(a) allow at least a portion of the samples to pass through the stack of membranes; and

(b) allow the multiple membranes to capture at least a portion of the biomolecules from each of the samples, thereby forming multiple substantial replicas of the biomolecular content of the multi-well sample holder.

2. (original) The method of claim 1, which is a method of detecting one or more biomolecules, further comprising detecting at least one biomolecule of interest on at least one of the multiple membranes.

3. (original) The method of claim 2, wherein detecting biomolecules of interest comprises exposing at least one of the multiple membranes to a detector.

4. (original) The method of claim 3, further comprising separating the multiple membranes from each other and from the multi-well sample holder prior to detecting the biomolecules of interest.

5. (original) The method of claim 1, wherein the biomolecules comprise proteins, nucleic acids, or mixtures thereof.

6. (original) The method according to claim 1 wherein each of the membranes comprises a porous substrate having a thickness of less than 30 microns and no less than 4 microns.

7. (original) The method according to claim 6 wherein one or more of the membranes comprise a material for increasing an affinity of at least one of the membranes to the biomolecules.

8. (original) The method of claim 7, wherein the material is coated on one or more of the membranes.

9. (original) The method of claim 6, wherein the porous substrate comprises a material selected from the group consisting of polycarbonate, cellulose acetate, and mixtures thereof.

10. (original) The method of claim 9, wherein the porous substrate is a polycarbonate substrate.

11. (original) The method of claim 7, wherein the material for increasing affinity is selected from the group consisting of nitrocellulose, poly-L-lysine, and mixtures thereof.

12. (original) The method according to claim 5, wherein at least one of the samples comprises proteins.

13. (original) The method of claim 2, wherein detecting the biomolecules comprises separating one or more of the membranes from the stack, and detecting the biomolecules on one or more of the separated membranes.

14. (Amended herein) The method of claim 1, wherein the conditions that allow at least a portion of the samples to pass through the multiple membranes ~~comprises~~ comprise applying at least partial vacuum that encourages movement of the sample through the stack of membranes in a desired direction of movement.

15. (Amended herein) The method of claim 1, wherein the conditions that allow at least a portion of the samples to pass through the multiple membranes ~~comprises~~ comprise providing a wick that facilitates movement of the sample through the stack of membranes in a desired direction of movement.

16. (original) The method of claim 1, wherein the stack of membranes comprises 5 or more membranes.

17. (original) The method of claim 1, wherein at least one of the samples comprises nucleic acid.

18. (original) The method of claim 17, wherein the at least one sample comprises DNA.

19. (original) The method of claim 1, further comprising correlating the biomolecules detected on the one or more membranes with a biological characteristic of the sample.

20. (original) A method for identifying one or more biomolecules from a plurality of wells in a multi-well plate comprising:

providing a multi-well plate assembly;

providing a stack of at least two membranes;

operatively securing the stack to the multi-well plate assembly;

introducing biomolecules into two or more wells of the multi-well plate;

transferring biomolecules from the wells to multiple membranes in the stack;

separating the membranes; and

identifying the one or more biomolecules on the multiple membranes.

21. (original) The method of claim 20, wherein the biomolecules comprise proteins, DNA molecules, RNA molecules, or mixtures of two or more thereof.

22. (New) The method of claim 1, wherein the membranes are formed of track-etched polymeric material.

23. (New) The method of claim 20, wherein the membranes are formed of track-etched polymeric material.

24. (New) The method of claim 1, wherein one or more of the membranes are coated with an antibody or other capture molecule having an affinity to a particular target molecule.

25. (New) The method of claim 20, wherein one or more of the membranes are coated with an antibody or other capture molecule having an affinity to a particular target molecule.

26. (New) The method of claim 20, wherein the membranes are formed of track-etched polymeric material, and one or more of the membranes are coated with an antibody or other capture molecule having an affinity to a particular target molecule.

27. (New) A method of making multiple substantial replicas of a biomolecular content of a multi-well sample holder, which method comprises:

providing a stack of membranes, wherein the membranes are formed of track-etched polymeric material and one or more membranes are coated with an antibody or other capture molecule having an affinity to a particular target molecule;

applying two or more samples comprising biomolecules to at least two wells of the multi-well sample holder, under conditions that

(a) allow at least a portion of the samples to pass through the stack of membranes; and

(b) allow the multiple membranes to capture at least a portion of the biomolecules from each of the samples, thereby forming multiple substantial replicas of the biomolecular content of the multi-well sample holder.